How to do Solar Energy Systems (Photovoltaic) in Hermosa Beach

Why Go Solar?

Solar photovoltaic (PV) technology converts sunlight directly into electricity. Increasing solar power is an important and efficient way that Hermosa Beach residents and businesses can create clean energy and gain the following benefits:

- Solar energy puts the power to supply your electricity needs directly in your hands.
- Harnessing the power of the sun can help lower your electric bill, decrease annual operating costs, and increase your property’s value.
- Tax credits and incentives currently available can help lower your out-of-pocket costs and maximize your investment. Refer to the resources below.
- Solar energy improves air quality by generating electricity free from harmful emissions. Los Angeles has the worst air quality in the nation.
- Solar power helps ease demand on the power grid, which increases system reliability and decreases the need to build more power plants.
- Solar energy can be used to power electric vehicles which reduce air pollution, noise and health impacts.
- Solar power reduces dependence on fossil fuels and greenhouse gases.

California has set a goal to create 3,000 megawatts of new solar-produced electricity by 2017, moving the state toward a cleaner energy future while helping to lower the cost of "going solar."


Will a Solar Energy System Work at My Home or Business?

Before considering solar, you are advised to implement conservation measures. In addition to gaining many of the benefits above, conversation will minimize the size of your PV system and make your home or business a more comfortable and healthy place to be.

Next, consider where the panels can be mounted and how much sunlight this area receives. This area should have clear, unobstructed access to the sun for most of the day, and throughout the year. The best orientation for a PV system is on a south-facing roof; roofs that face east or west may also be acceptable. A flat roof can also work because the PV array can be mounted on frames tilting south. A PV array can also be mounted on the ground, outside the property setbacks required by zoning. In Hermosa Beach, roof mounted systems are likely the best option.

Several factors will influence the size of the system. First, consider your present electricity needs. A solar installer/contractor will help you with this. The average residential solar system size in SCE’s service territory is 5 kW, and the average non-residential solar system size is 262 kW (California Solar Initiative-funded systems.) The amount of roof space needed is based on the size, or generating capacity, of the system. Residential systems can vary in size from 50 to
1,000 square feet. A good rule of thumb is that a square foot of PV module area produces 10 watts of power in bright sunlight. For example, a 2,000-watt system would require about 200 square feet of roof area.

Contact the California Solar Initiative (http://www.gosolarcalifornia.org/) for a list of registered installers; it is recommended that you get at least three bids for your project.

What Permits are Required to Install Solar Panels?

- You will need an electrical permit and changes to the roof, if any, may require a building permit. Contact the Community Development Department at (310) 318-0235. The City Council has been waiving permits all fees. (Call in advance to confirm the fee waiver continues to be in effect).
- In addition to the Building Codes, the City has adopted regulations allowing systems to exceed the height limits. http://www.hermosabch.org/index.aspx?page=458#220.
- Typically a solar contractor will submit the required applications and plans. Structural plans may be required for work to reinforce the roof to carry the additional load.
- The application will be reviewed by the Community Development Department and Fire Department for conformance with Zoning, Building and Fire Codes.
- Southern California Edison (SCE) and the California Solar Initiative have additional requirements. http://www.sce.com/solarleadership/gosolar/go-solar.htm

Have Many People in Hermosa Beach Have Installed Solar?

The City permitted 72 PV systems in the past five years (66 residential, 6 commercial including apartment buildings). Some people are using their solar systems to charge their electric vehicles in addition to their homes. Several buildings include solar systems as part of a LEED or Build-It Green building certification. The City now requires new buildings to install conduit to accommodate future PV installations.

Can the City, My Homeowners Association or a Neighbor Prevent Me from Installing Solar on My Roof?

In general you cannot be prohibited from installing solar on your roof. You must obtain the required City permits. The laws cited below can be accessed at:
http://www.leginfo.ca.gov/calaw.html

- Solar Rights Act (Civil Code section 714): Requires that public entities do not place unreasonable restrictions on the procurement of solar energy systems when a person is applying for state-sponsored grants and loans.
- Solar Easement Law (Civil Code sections 801, 801.5): Provides the opportunity to protect future solar access via a negotiated easement with neighboring property owners.

**Resources & Incentives for Solar Energy Systems**

- Database of State Incentives for Renewables and Efficiency: [http://www.dsireusa.org/](http://www.dsireusa.org/)
- South Bay Environmental Services Center [http://www.sbesc.com/](http://www.sbesc.com/)